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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,761	09/15/2003	J. Christopher Flaherty	59249-157 (INSL-125DV)	1492

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INSULET CORPORATION  
9 Oak Park Drive  
Bedford, MA 01730

EXAMINER
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MACNEILL, ELIZABETH

ART UNIT	PAPER NUMBER
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3767

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/662,761

Applicant(s)

FLAHERTY ET AL.

Examiner

Elizabeth R. MacNeill

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 31-79, 82 and 83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-79, 82 and 83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 31-33,36-42, 49-59; 61-65, and 69-79 are rejected under 35 U.S.C. 102(e) as being anticipated by HALLER (US 7,070,577).

Regarding claims 31 and 61, Haller teaches A device for delivering fluid to a patient, comprising: an exit port assembly (35); a dispenser (generally the upper portion of the device shown in figure 2A) including, a container (45) having an outlet (generally path 50) connected to the exit port assembly, an inlet (Fig 3A) for connection to a reservoir, and a side wall (44) extending along a longitudinal axis towards the outlet and the inlet, and a plunger assembly (42) received in the container and including, a first lateral segment (53) extending laterally with respect to the longitudinal axis of the container and contacting the side wall of the container, a second lateral segment (54) positioned between the first lateral segment and the outlet of the container, the second lateral segment extending laterally with respect to the longitudinal axis of the container and contacting the side wall of the container, and longitudinally spaced from the first lateral segment, and a shape memory element (41) having a changeable length decreasing

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from an uncharged length to a charged length when at least one charge is applied to the shape memory element, the shape memory element connecting the first and the second lateral segments.

Regarding claims 32,39,40,58,59 the shape memory element (SME) is a one- or two-way nickel and titanium alloy (Nitinol) with a predetermined charged and uncharged length

Regarding claim 33, the SME is connected to the first and second lateral segments

Regarding claim 36, the SME is a collapsible bellows

Regarding claims 37 and 38, 62 and 63, the plunger assembly includes a rigid projection (42) with a predetermined length

Regarding claims 41 and 64, the plunger assembly does not rotating with respect to the side wall (Figs 3A-3B)

Regarding claims 42 and 65, the first lateral segment is fixed to the container.

Regarding claims 49-51 and 69-71, there is a reservoir (2) connected to the inlet of the dispenser, which contains insulin

Regarding claims 52 and 53, 72 and 73, the exit port assembly includes a patient access tool which is a needle

Regarding claims 54 and 55, 74 and 75, the device includes a local processor (10) with a battery

Regarding claims 56 and 57,76 and 77, the device includes a local processor (10), a wireless receiver (12) and a housing containing the dispenser (13), and a remote processor with transmitter (not shown)

Regarding claims 78 and 79, the plunger is activated by a solenoid or piezoelectric element.

3. Claims 31,34,35,43-48,60,61,66-68,82, and 83 are rejected under 35 U.S.C. 102(e) as being anticipated by NASON (US 7,052,251).

Regarding claims 31 and 61, Nason teaches A device for delivering fluid to a patient, comprising: an exit port assembly (114); a dispenser including, a container (104) having an outlet (112) connected to the exit port assembly, an inlet (102) for connection to a reservoir, and a side wall (122) extending along a longitudinal axis towards the outlet and the inlet, and a plunger assembly (Fig 1B) received in the container and including, a first lateral segment (124) extending laterally with respect to the longitudinal axis of the container and contacting the side wall of the container, a second lateral segment (138) positioned between the first lateral segment and the outlet of the container, the second lateral segment extending laterally with respect to the longitudinal axis of the container and contacting the side wall of the container, and longitudinally spaced from the first lateral segment, and a shape memory element (130) having a changeable length decreasing from an uncharged length to a charged length when at least one charge is applied to the shape memory element, the shape memory element connecting the first and the second lateral segments.

Regarding claims 34,35 and 60, the shape memory element (SME) is a wire spring having a generally circular cross-section.

Regarding claims 43-45, the SMA acts as a cooler and heat sink or thermoelectric cooler as modulation of voltage accelerates cooling the wire to ambient temperature (Col 3 lines 53-62).

Regarding claims 46 and 66 there is an outlet valve (112)

Regarding claims 47 and 67 there is an inlet valve (106)

Regarding claims 48 and 68, 82 and 83, the side wall contains a first section (128) and a second section (136) with a strut (vertical portion of piece 136) See Fig 1A

### ***Response to Arguments***

1. Applicant's arguments, see remarks, filed 19 March 2007, with respect to the non-statutory double patenting rejection have been fully considered and are persuasive. The rejection of claims 31-79, 82 and 83 has been withdrawn.
2. Applicant's arguments filed 19 March 2007 have been fully considered but they are not persuasive. Regarding Haller and Nason, as applied to claims 31-33, 36-42, 49-59, 61-65, and 69-79, applicant has argued that Haller and Nason do not teach a plunger. This is not convincing because the plunger recited in the claims does not perform any function (i.e. driving fluid or causing fluid to be expelled) and has no claimed structure. The broadest reasonable interpretation of "plunger" by one of ordinary skill in the art would include the elements indicated by the examiner since they are a part of a machine which "thrust or drops downward." Furthermore, no "syringe pump" is claimed. Specifically regarding Nason, the claim language does not require that the shape memory element be the only element connecting the first and second lateral segments or that the segments be separate from the plunger.

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth R. MacNeill whose telephone number is (571)-272-9970. The examiner can normally be reached on 7:00-3:30pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Mauk  
4/10/07*

KEVIN C. SIRMONS  
SUPERVISORY PATENT EXAMINER

*Kevin C. Sirmons*